Grimsargh St Michael's CE Primary School
Progression of Skills
Design & Technology

This progression of skills document details how each key skill develops sequentially in Design & Technology throughout school.

Areas of study	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Design	Talk about ideas, choose resources, tools and techniques with a purpose in mind	Use pictures and words to convey what they want to design/make Explore ideas by rearranging materials Select pictures to help develop ideas Use mock-ups e.g. recycled material, trial models to try out their ideas	Propose more than one idea for their product Use ICT to communicate ideas Use drawings to record ideas as they are developed Add notes to drawings to help explanations	Develop more than one design or adaptation of an initial design Plan a sequence of actions to make a product Think ahead about the order of their work and decide upon tools and materials	Record the plan by drawing using annotated sketches Use prototypes to develop and share ideas Consider aesthetic qualities of materials chosen Use CAD where appropriate	Record ideas using annotated diagrams Use models, kits and drawings to help formulate design ideas Sketch and model alternative ideas Decide which design idea to develop	Plan the sequence of work Devise step by step plans which can be read/followed by someone else Use exploded diagrams and cross-sectional-diagrams to communicate ideas

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				Propose realistic suggestions as to how they can achieve their design ideas.			
Make	Experiment and build with a range of construction resources, find out about the properties and functions of different construction materials Make models	Select materials from a limited range Explain what they are making Name the tools they are using	Discuss their work as it progresses Select and name the tools needed to work the materials Explain which materials they are using and why	Select from a range of tools for cutting, shaping, joining and finishing Use tools with accuracy Select from materials according to their functional properties	Prepare pattern pieces as templates for their design Select from techniques for different parts of the process	Develop one idea in depth Select from and use a wide range of tools Cut accurately and safely to a marked line Select from and use a wide range of materials	Make prototypes Use researched information to inform decisions Produced detailed lists of ingredients/components/materials and tools Refine their product – review and rework/improve

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	using different construction materials, e.g. construction kits, reclaimed materials, experiment with different ways to build, construct and join resources			Use appropriate finishing techniques			

Evaluate	Talk about what they like/dislike about their models/ constructions, say why and how they would change them	Explore existing products and investigate how they have been made (including teacher-made examples)	Decide how existing products do/do not achieve their purpose Discuss how closely their	Investigate similar products to the one to be made to give starting points for a design Research needs of user	Draw/sketch existing products in order to analyse and understand how products are made	Research and evaluate existing products Consider user and purpose Consider and explain how the	Identify the strengths and weaknesses of their design ideas Report using correct

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		Talk about their design as they develop and identify good and bad points Say what they like and do not like about items they have made and attempt to say why	finished product meets their own design criteria	Decide which design idea to develop Consider and explain how the finished product could be improved Discuss how well the finished product meets the user's design criteria Investigate key events and individuals in Design and Technology	Identify the strengths and weaknesses of their design ideas in relation to purpose/user Consider and explain how the finished product could be improved Investigate key events and individuals in Design and Technology	finished product could be improved related to design criteria Investigate key events and individuals in Design and Technology	technical vocabulary Discuss how well the finished product meets the design criteria having tested on/discussed outcomes with the user Understand how key people have influenced design in a variety of contexts

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Technical Knowledge		Start to use technical vocabulary Join materials in a variety of ways Know some ways of making structures stronger Show how to stiffen some materials Know how to make a simple structure more stable	Cut out shapes which have been created by drawing round a template Attach wheels to a chassis using an axle Decorate using a variety of techniques	Use an increasingly appropriate technical vocabulary for tools materials and their properties Understand seam allowance Prototype a product Sew on buttons and make loops Strengthen frames with diagonal struts Use linkages to make movement larger or more varied	Measure and mark square section, strip and dowel accurately to 1cm Use electrical systems, such as switches, bulbs and buzzers Incorporate a circuit into a model Use ICT to control products	Use the correct vocabulary appropriate to the project Join materials using appropriate methods Create 3D textile projects using pattern pieces Understand pattern layout with textiles Use mechanical systems such as cams, pulleys and gears	Cut strip wood, dowel, square section wood accurately to 1cm Stiffen and reinforce complex structures Build frameworks to support mechanisms Use electrical systems, such as motors and switches Program, monitor and control using ICT

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Cooking and Nutrition	Use tools and equipment linked to food preparation Handle and use equipment appropriately and safely	Group familiar food products e.g. fruit and vegetables Cut and chop a range of ingredients Work safely and hygienically Know about the need for a variety of foods in a diet	Cut, peel, grate, chop a range of ingredients Work safely and hygienically Know about the *Eatwell Plate* Understand where food comes from	Follow instructions/recipes Join and combine a range of ingredients Begin to understand the food groups on the *Eatwell Plate*	Make healthy eating choices – use the *Eatwell Plate* Understand seasonality Know where and how ingredients are reared and caught Prepare and cook using different cooking techniques	Join and combine a widening range of ingredients Select and prepare foods for a particular purpose Know where and how ingredients are grown and processed	Understand and apply the principles of a healthy and varied diet. Choose ingredients to support healthy eating choices when designing their food products Prepare and cook a variety of mostly savoury dishes using a range of cooking techniques